



Call for Papers

Thermal & Fluids Analysis Workshop (TFAWS) 2005

August 8 -12, 2005

Co-Hosted By: The University of Central Florida, Orlando, Florida
NASA Kennedy Space Center
Spaceport Research & Technology Institute, & Arctic Slope Regional Corporation

You are invited to submit papers for the Thermal & Fluids Analysis Workshop (TFAWS '05). This year's workshop will include short courses of general interest in thermal and CFD, discussions on special topics, hands-on training sessions in many thermal and fluid software packages, vendor demonstrations and paper sessions on the topics listed below:

Thermal Interdisciplinary Applied Fluid Dynamics Propulsion

Thermal session topics include:

- Analytical methods: modeling techniques, tips, tricks, and pitfalls, model verification, grid refinement studies, links to CAD codes
- Thermal control, design, analysis and test; test correlation
- Aircraft, launch vehicles and spacecraft, systems, and payloads (design/flight experience)
- Ground test, manufacturing processes and simulation
- Numerical methods

Interdisciplinary topics include:

- Concurrent design and analysis
- Multi-disciplinary analysis such as the interface between thermal and structural analysis
- Combined analysis of heat transfer with high/low speed fluid flow and aero-elastic analysis
- Automation of test correlation, analysis, and method development
- High-speed aero-heating including ablation and transpiration
- CFD analysis and methods; internal/external flow analysis/test
- Subsonic and transonic applications such as avionics cooling
- Conjugate heat transfer

Applied Fluid Dynamics topics include:

- Fluid systems control, design and test
- Vibration and acoustics in the launch environment
- Multiphase flow applications used to analyze contamination

Propulsion topics include:

- CFD developments and applications for propulsion; propulsion analysis tools
- Modeling/testing of propulsion elements, components or systems
- Design/development of propulsion systems/components and cryogenic, nuclear or other novel propulsion concepts
- Propulsion to vehicle and spacecraft integration
- Analysis, testing, or novel design concepts for combustion devices

Abstracts less than 200 words should be submitted to TFAWS2005@ksc.nasa.gov by June 6th, 2005. SI units are preferred in all papers. Typically, 20 minutes will be allotted for each paper, and ten additional minutes for questions from the audience. Additional time may be requested. Papers and seminars will be published on CD-ROM and distributed at the conference. Instructions for electronic manuscript submission will accompany acceptance of abstract. It is the author's responsibility to ensure that presentations content is not restricted by law, contract or prohibited in any way from being presented at this conference. Personal biography and clearance forms must be submitted to the session chair. For details on TFAWS '05 go to www.ustdc.com/tfaws or contact Laurie Walls at (321)867-1968.

Milestones TFAWS '05

Abstracts due June 6	Acceptance notices out June 10	Papers due (electronic format) July 11	Last day for pre-registration August 1
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